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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/957,458	09/21/2001	Yu-Hua Una Chen-Bettecken	P66567US0 2503	
7590 06/16/2005			EXAMINER	
JACOBSON HOLMAN			CROUCH, DEBORAH	
400 SEVENTH STREET, N.W. WASHINGTON, DC 20004			ART UNIT	PAPER NUMBER
			1632	
		DATE MAILED: 06/16/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summany	09/957,458	CHEN-BETTECKEN, YU-HUA UNA				
Office Action Summary	Examiner	Art Unit				
	Deborah Crouch, Ph.D.	1632				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
2a) ☐ This action is FINAL . 2b) ☐ This	This action is FINAL . 2b) ☐ This action is non-final.					
3) Since this application is in condition for allowan	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-17</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.					
8)⊠ Claim(s) <u>1-17</u> are subject to restriction and/or e	8) Claim(s) 1-17 are subject to restriction and/or election requirement.					
Application Papers						
9) The specification is objected to by the Examiner	•					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Dotice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) DNotice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal Pa	itent Application (PTO-152)				
S. Patent and Trademark Office						

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Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-11, 13, 14 and 16, drawn to a method for growth stem cells comprising providing stem cells with genetically modified supporters to provide regulatable interactions and applying an external signal, classified in class 435, subclass 325.
- II. Claim 12, drawn to a vector, classified in class 435, subclass 320.1.
- III. Claim 15, drawn to a method of curing diseases by administering genetically engineered supporters, classified in class 424, subclass 93.21.
- IV. Claim 17, drawn to method of producing stem or supporter cell derivatives, classified in class 435, subclass 69.1.

The inventions are distinct, each from the other because:

Inventions I and II are distinct because they are capable of separate use. The method for growing stem cells of invention I can be used to produce stem cells for in vitro differentiation. The vector of invention II can be used to produce recombinant protein in transfected cells.

Inventions I and III are distinct because they are capable of separate use. The method for growing stem cells of invention I can be used to produce stem cells for in vitro differentiation. The method of invention III can be used in tissue replacement therapy.

Inventions I and IV are distinct because they are capable of separate use. The method for growing stem cells of invention I can be used to produce stem cells for in vitro differentiation. The method of invention IV can be use to produce cell products.

Inventions II and III are distinct because they are capable of separate uses. The vector of invention II can be used to produce recombinant protein in transfected cells. The method of invention III can be used in tissue replacement therapy.

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Inventions II and IV are distinct because they are capable of separate uses. The vector of invention II can be used to produce recombinant protein in transfected cells. The method of invention IV can be use to produce cell products.

Inventions III and IV are distinct because they are capable of separate uses. The method of invention III can be used in tissue replacement therapy. The method of invention IV can be use to produce cell products.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper and are distinct for the reasons given above and the search required for Groups I-IV are not coextensive, restriction for examination purposes as indicated is proper.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier.

Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an

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otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of In re Ochiai, In re Brouwer and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Crouch, Ph.D. whose telephone number is 571-272-0727. The examiner can normally be reached on M-Th, 8:30 AM to 7:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla, Ph.D. can be reached on 571-272-0735. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Deboral Cranch

Deborah Crouch, Ph.D.

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May 28, 2005